REMARKS

Claims 1-34 are pending in this application. Claims 1, 4, 7, 10, 13, 16, 18, 20, and 23-34 are independent. In light of the remarks made herein, Applicant respectfully request reconsideration and withdrawal of the outstanding rejections.

In the outstanding Official Action, the Examiner rejected claims 25-26 and 31-32 under 35 U.S.C. §112, second paragraph; and rejected claims 1-14, 16, 18, 20, 21 and 23-34 under 35 U.S.C. §102(e) as being anticipated by *Jiang* (USP 6,760,737). Applicant respectfully traverses these rejections.

Applicant wishes to thank the Examiner for indicating that claims 15, 17, 19 and 22 include allowable subject matter.

Claim Rejections – 35 U.S.C. §112

The Examiner rejected claims 25-26 and 21-23 under 35 U.S.C. §112, second paragraph asserting the single claim is directed to both an apparatus and a method, citing to MPEP §2173(p)(II). Applicant respectfully disagrees with the Examiner's assertions.

MPEP §2173(p)(II) prohibits a single claim which claims both an apparatus and the method steps of using the apparatus, citing to *IPXL Holdings v. Amazon.com, Inc.*, 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005). The claim referred to in the *IPXL* case cited recites:

> The system of claim 2 [including an input means] wherein the predicted transaction information comprises both a transaction type and transaction parameters associated with that transaction type, and the user uses the input means to either change the predicted transaction information or accept the displayed transaction type and transaction parameters.

The court, in this case asserted that it is unclear whether infringement of this claim occurs when one creates a system that allows the user to change the predicted transaction information or

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accept the displayed transaction, or whether infringement occurs when the user actually uses the input means to change transaction information or uses the input means to accept a displayed transaction. Because claim 25 recites both a system and the method for using that system, the court stated it does not apprise a person of ordinary skill in the art of its scope, and it is invalid under section 112, paragraph 2.

In contrast, the claims rejected by the Examiner recite an apparatus comprising a memory storing a set of instructions; and a processor executing the stored set of instructions to perform a method. It is clear from the recitations in the claim that an apparatus is recited that includes a processor to perform a method. There is no recited "use of the apparatus" as purported by the Examiner. As such, Applicant respectfully submits that the claims are definite and proper and it is respectfully requested that the outstanding rejection be withdrawn.

Claim Rejections – 35 U.S.C. §102

In support of the Examiner's rejection of claim 1, the Examiner asserts that *Jiang* discloses all of the elements of the claim, including removing means for removing, from said received N pixel values, first to ((N-1)/2)th pixel values as sorted in accordance with a prescribed order, citing to Fig. 1 and col. 3, line 59 – col. 4, line 10. The Examiner further asserts *Jiang* discloses the sorting means as claimed citing to col. 4, lines 10-42. Applicant resepctfully disagrees with the Examiner's characterization of this reference.

At the outset, there is no disclosure in *Jiang* that is directed to receiving pixel values. *Jiang* is merely directed to a spatial median filter that determines a median of a plurality of values. For at least this reason, *Jiang* fails to anticipate claim 1 by failing to teach or suggest pixel values.

Further, claim 1 recites a filtering apparatus calculating a median of N pixel values arranged in a two-dimensional area of K*K (K is an odd number not smaller than 3) of a digitized image, comprising receiving means for receiving said N pixel values; removing means for removing, from said received N pixel values, first to ((N-1)/2)th pixel values as sorted in

accordance with a prescribed order; and sorting means for outputting, among $(N-(N-1)/2)$ pixel values remaining after removal of the pixel values by said removing means, first pixel value as sorted in accordance with said prescribed order as said median.

In contrast, the disclosure of *Jiang* is directed to a spatial median filter.

At col. 3, line 53 through col. 4, line 25, *Jiang* discloses as follows:

Referring to FIG. 1, it is seen that the 9-points, i.e., values, are arranged into three groups of three values each, namely, a first group including values a, b and c, a second group including values d, e and f, and a third group including values g, h and j. The first group is supplied to sorter 101, the second group to sorter 102 and the third group to sorter 103. Sorters 101, 102 and 103 each perform a complete sort of their respective supplied groups, i.e., arrange the supplied values in either ascending or descending order. In the spatial median filter shown in FIG. 1, it is assumed that the values are arranged in ascending order. That is, A.sub.3.gtoreq.A.sub.2.gtoreq.A.sub.1 and so on for the other values. Note that a sorter of three values requires three comparisons. Thus, the three sorters 101, 102 and 103 perform nine comparisons. The median of each group is determined to be the middle value in the sorted group. The three medians from sorters 101, 102 and 103, in this example, are a.sub.2, b.sub.2 and c.sub.2, respectively, and are supplied to sorter 104. In turn, sorter 104 sons the three medians a.sub.2, b.sub.2 and c.sub.2. This requires another three comparisons. After sorting, the three medians a.sub.2, b.sub.2 and c.sub.2, are assumed to be arranged in ascending order and are designated .lambda., .beta. and .gamma., respectively, where .lambda..ltoreq..beta..ltoreq..gamma.. **Now the nine values of the spatial median filter are reduced to five values by removing four values. The remaining five values include the median of the nine values. This reduction is realized by first identifying the group of three values who's median is .lambda.. These values are labeled in ascending order as d.sub.1.ltoreq.d.sub.2.ltoreq.d.sub.3. It is noted that these three values had been sorted in the prior sorting operations. Additionally, since d.sub.2 is the median of the group, it has the same value as .lambda.. It can be shown that both d.sub.1 and d.sub.2 are each less than or equal to the median of the nine values and, hence, can be removed from the nine values. Now label the three values having .gamma. as its median in ascending order as f.sub.1.ltoreq.f.sub.2.ltoreq.f.sub.3. Again, it is noted that f.sub.2 has the same value as .gamma.. It can be shown that the values f.sub.2 and f.sub.3 are each greater than or equal to the median of the nine values and, hence, can also be removed from the nine values. Thus, leaving five values including d.sub.3, f.sub.1 and a group of three values having .beta. as its median that is labeled in ascending order as e.sub.1.ltoreq.e.sub.2.ltoreq.e.sub.3.**

It appears that the Examiner has taken the teachings of *Jiang* out of context. While at col. 4, lines 6-10, *Jiang* discloses that nine values are reduced to five values, the Examiner dismisses or ignores the disclosure at col. 4, lines 10-25 (and following) that disclose how the four values are reduced.

As can be seen from the above disclosure, *Jiang* discloses that values greater than the highest median value **and** values less than the lowest median value are removed.

In contrast, claim 1 clearly recites removing means for removing, from said received N pixel values, first to $((N-1)/2)$th pixel values as sorted in accordance with a prescribed order. *Jiang* fails to teach or suggest this claim element.

For at least these reasons, *Jiang* fails to anticipate claim 1 as the cited reference fails to teach or suggest all of the claim elements. As such, it is respectfully requested that the outstanding rejection be withdrawn.

It is respectfully submitted that claims 2-3 are allowable for the reasons set forth above with regard to claim 1 at least based on their dependency on claim 1.

Claim 4 recites "removing means for removing, from said received N pixel values, $((N-1)/2+2)$ to Nth pixel values as sorted in accordance with a prescribed order; and sorting means for outputting, among $(N-(N-1)/2)$ pixel values remaining after removal of the pixel values by said removing means, $(N-(N-1)/2)$th pixel value as sorted in accordance with said prescribed order as said median." The Examiner relies on the same citations to support his assertions that *Jiang* anticipates the claim elements. However, as analogously discussed above, *Jiang* teaches removing both high and low values. These teachings are insufficient to teach or suggest the claimed $((N-1)/2+2)$ to Nth pixel values.

For at least these reasons, *Jiang* fails to anticipate claim 4 as the cited reference fails to teach or suggest all of the claim elements. As such, it is respectfully requested that the outstanding rejection be withdrawn.

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It is respectfully submitted that claims 5-6 are allowable for the reasons set forth above with regard to claim 4 at least based on their dependency on claim 4.

It is further respectfully submitted that claims 10, 13, 16, 18, 20, and 23-34 include elements similar to those discussed above with regard to claims 1 or 4 and thus these claims, together with claims dependent thereon, are allowable for the reasons set forth above with regard to claims 1 or 4.
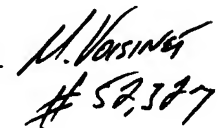
Conclusion

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Catherine Voisinet Reg. No. 52,327 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: December 13, 2007   Respectfully submitted,

By _____

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